PATENT COOPERATION TO

PCT



INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference	FOR EURTUER ACTION		
	FOR FURTHER ACTION	See Form PCT/IPEA/416	
International application No. PCT/EP2005/000193	International filing date (day/month/year) 10.01.2005	Priority date (day/month/year) 28.01.2004	
International Patent Classification (IPC) or r A23L1/39	national classification and IPC		
Applicant UNILEVER N.V. et al.			
This report is the international pre- Authority under Article 35 and train	eliminary examination report, established in the same stablished in	by this International Preliminary Examining icle 36.	
2. This REPORT consists of a total	of 5 sheets, including this cover sheet.		
3. This report is also accompanied b			
a. 🗵 sent to the applicant and to the International Bureau) a total of 1 sheets, as follows:			
sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).			
sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.			
b. ☐ (sent to the International B	ureau only) a total of (indicate type and n	umber of electronic carrier(s)) , containing a	
sequence listing and/or tab	les related thereto, in computer readable Listing (see Section 802 of the Administra	form only as indicated in the Supplemental	
Dox Holdling to Dequence	Listing (see Section 802 of the Administra	ative instructions).	
4. This report contains indications re	lating to the following items:		
☐ Box No. I Basis of the opin	nion		
☐ Box No. II Priority			
☐ Box No. III Non-establishme	ent of opinion with regard to novelty, inver	ntive step and industrial applicability	
☐ Box No. IV Lack of unity of i		and the manual applicability	
аррисарину; спа	ment under Article 35(2) with regard to no tions and explanations supporting such s	velty, inventive step or industrial tatement	
☐ Box No. VI Certain docume			
	n the international application		
☐ Box No. VIII Certain observat	ions on the international application		
Date of submission of the demand	Date of completion	of this report	
01.07.2005	26.09.2005		
	Authorized Officer		
Name and mailing address of the international preliminary examining authority:	i	- Br*	
preliminary examining authority: European Patent Office		turbeches Potanian.	
preliminary examining authority:	Heirbaut, M	and the control of th	

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/EP2005/000193

-	Dan Mail	
-	Box No. I	Basis of the report
1	. With regard filed, unless	to the language , this report is based on the international application in the language in which it was so otherwise indicated under this item.
		port is based on translations from the original language into the following language , s the language of a translation furnished for the purposes of:
	⊔ inte □ pub	rnational search (under Rules 12.3 and 23.1(b)) lication of the international application (under Rule 12.4) rnational preliminary examination (under Rules 55.2 and/or 55.3)
2		to the elements * of the international application, this report is based on <i>(replacement sheets which furnished to the receiving Office in response to an invitation under Article 14 are referred to in this riginally filed" and are not annexed to this report):</i>
	Description, Pages	
	1-9	as originally filed
	Claims, Num	bers
	9-12	as originally filed
	1-8	received on 01.07.2005 with letter of 29.06.2005
	□ a seque	nce listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing
3.	☐ The ame	endments have resulted in the cancellation of:
	☐ the d	escription, pages
	☐ the d	laims, Nos. rawings, sheets/figs
	⊔ the s	equence listing <i>(specify)</i> :
	⊔ any t	able(s) related to sequence listing (specify):
4.		ort has been established as if (some of) the amendments annexed to this report and listed below made, since they have been considered to go beyond the disclosure as filed, as indicated in the I Box (Rule 70.2(c)).
	☐ the d	escription, pages
	☐ the d	aims, Nos. rawings, sheets/figs
	☐ the se	equence listing (specify):
		able(s) related to sequence listing (specify):
	* If item	4 applies, some or all of these sheets may be marked "supergoded "

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims

1-12

No:

Claims

Inventive step (IS)

Yes: Claims

1-12

No: Claims

Industrial applicability (IA)

Yes: Claims

1-12

No: Claims

2. Citations and explanations (Rule 70.7):

see separate sheet

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The amended set of claims meets the requirements of Art. 34(2)(b) PCT.

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1 Reference is made to the following prior art documents (D):

D1: US-A-5 514 406 D2: WO-A-03 037 095 D3: US-A-5 871 799

The subject-matter of present independent claim 1 (composition) meets the requirements of novelty (Article 33(2) PCT).

None of the cited prior art documents teaches a savoury food composition having (1) a free-flowing powdery form; (2) 0.5-50 wt% of powdered fat comprising trigly-cerides of fatty acids of which the amount of H3 and H2U together is at least 55 wt% based on the total amount of triglycerides; and (3) a ratio of palmitic acid to stearic acid of at least 0.2 and less than 4.

The subject-matter of the present application meets the requirements of inventive step (Article 33(3) PCT).

Document D1, which is considered to represent the closest prior art, teaches oil and fat compositions with reduced digestive properties, containing 50% or more tristearin, which can be provided in a powdered form (see in particular column 1 lines 7-11; column 2 lines 32-42, 56-64 in D1).

The subject-matter of the present application differs from the teaching of document

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D1 in that (1) it is specifically indicated that the oil and fat compositions are to be employed in savoury food compositions comprising 2-80 wt% of edible salt; and (2) the ratio palmitic/stearic in the fatty acid triglycerides is between 0.2 and 4.

The technical problem facing the skilled person at the priority date of the present application was to provide savoury food preparations comprising powdered fat with low levels of trans-type unsaturated fatty acids, in free-flowing powdery form, which do not suffer from off-flavours after prolonged storage, of which the fats display rapid crystallisation after spray cooling, good mouth feel, fat staining and general processability (see page 2 paragraph 4 to page 3 paragraph 1 of the present description and working examples).

The solution of said technical problem, ie through the above mentioned modifications of the teaching of D1, is not obvious with regard to document D1 alone or in combination with the other prior art documents cited in the search report. Document D1 also states the technical problem of reducing digestive properties, and does not specifically refer to savoury food compositions, but to bakery/confectionery and milk products. The same applies to document D3. Document D2 does not specifically refer to savoury powdered compositions either, and does not teach the importance of a specific H3+H2U level and of the ratio palmitic acid/stearic acid.

4 Dependent claims 2-12 disclose particular embodiments of the independent claim referred to above, and meet the requirements of novelty and inventive step as well.

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CLAIMS

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- 1. Savoury food composition in a non-compressed free-flowing powdery form, which composition comprises 0.5-50% wt (preferably 1-40% wt) of powdered fat, 2-80% wt (preferably 5-50%) of an edible salt, which composition contains less than 15% wt (preferably less than 10% wt) of water, wherein said powdered fat comprises triglycerides of fatty acids of which the amount of H3 (triglyceride of 3 saturated fatty acids of 16 or more carbon atoms) and H2U (triglyceride of 2 saturated fatty acids of 16 or more carbon atoms and 1 cis-unsaturated fatty acid) taken together is at least 55% wt based on the total amount of triglycerides, and wherein the ratio palmitic acid / stearic acid in the fatty acid triglycerides is less than 4 and at least 0.2.
- 2. Savoury composition according to claim 1, wherein the ratio palmitic acid / stearic acid in the fatty acid triglycerides is at least 0.5.
- 15 3. Savoury composition according to claim 1-2, wherein the amount of stearic acid in the triglycerides is at least 15% of all fatty acids in the triglycerides.
 - 4. Savoury composition according to claim 1-3 wherein said amount of H3 + H2U is at least 65% wt based on the total amount of triglycerides.
 - 5. Savoury composition according to claim 1-4, wherein the amount of H3 (triglyceride of 3 saturated fatty acids of 16 or more carbon atoms) is at least 20% wt based on the total amount of triglycerides, preferably at least 25%.
- 25 6. Savoury composition according to claim 1-5, wherein the amount of H2U (triglyceride of 2 saturated fatty acids of 16 or more carbon atoms and 1 cis-unsaturated fatty acid) taken together is at least 30% wt based on the total amount of triglycerides.
- 7. Savoury composition according to claim 1-6, wherein the ratio H3 / H2U is between 0.5 and 1.2.
 - 8. Savoury composition according to claim 1-7, wherein the amount of palmitic fatty acid (C16:0) based on the total amount of fatty acids is between 25 and 50% wt.